## Course Syllabus Organic Chemistry Lab—CHEM 2026

Sean P. Hickey **Instructor:** 

College: University of New Orleans

**Semester:** Spring 2010

**Credit Hours:** 

Class Time: Lecture—M 12:30-1:20 pm, SCIENCE 2049

Lab—M 1:20-3:20 pm; W 12:30-3:20, SCIENCE 1008/1024

<u>Macroscale and Microscale Organic Experiments</u> by Williamson, 5<sup>th</sup> edition **Texts:** 

**CSB 112** Office:

Office Phone: **280-1273**(or contact me at **sphickey@uno.edu**)

Office Hours: M-R 11-12 (or by appointment) **Prerequisite:** Completion of CHEM 1028 and 2217 **Graduate TA's:** Michael St. Martin (mjstmart@uno.edu);

Sanjeeva Dodlapati (sdodlapa@uno.edu);

Kalika Murthy Aritakula (karitakula@uno.edu); Subramanya Pingali (karitakula@uno.edu)

Course Description: This lab course is designed to complement CHEM 2217/2218(Organic Chemistry I/II). Basic organic techniques will be learned at the beginning of the term. Reactions schemes and synthesis will be studied in the second half of the term.

<u>Grading and Classroom Procedures:</u> A missed exam or assignment will be a zero unless there is an excused, documented absence. The drop date is **January 29**th for nothing to appear on transcript and April 5<sup>th</sup> for W. There will be a mid-term and a final exam in the lecture. There will be 16 lab reports that will be graded from lab. Each lab report will be worth 25 points. The mid-term will be worth 150 points and the final will be worth 250 points. Participation/lab performance, quizzes and homework will be worth 200 points. There will be a total of 1000 points. A = 90%(900); B = 80%(800); C = 70%(700); D = 90%(900)60% (600).

Lab Notebooks: TA will sign your notebook when you enter the lab and when you leave the lab. This will serve as your lab attendance and to help verify your performance. Lab notebooks are due at the BEGINNING of Lecture (on Mondays) and/or BEGINNING of Lab (on Wednesdays). Late reports will be deducted 5 points.

Date	Day	Chapters	Date	Day	Chapters
January 11 <sup>th</sup>	Monday	1 and 2	March 10 <sup>th</sup>	Wednesday	MIDTERM EXAM
January 13 <sup>th</sup>	Wednesday	3	March 15 <sup>th</sup>	Monday	16
January 25 <sup>th</sup>	Monday	4	March 22 <sup>nd</sup>	Monday	29 and 40
February 1 <sup>st</sup>	Monday	5	April 5 <sup>th</sup>	Monday	37 and 61
February 8 <sup>th</sup>	Monday	6	April 12 <sup>th</sup>	Monday	48 and 44
February 22 <sup>nd</sup>	Monday	7	April 19 <sup>th</sup>	Monday	39 and 46
March 1 <sup>st</sup>	Monday	8	April 26 <sup>th</sup>	Monday	46 and Review
March 8 <sup>th</sup>	Monday	9	April 28 <sup>th</sup>	Wednesday	FINAL EXAM

January 18<sup>th</sup> (MLK), February 15<sup>th</sup> (Mardi Gras) NO LECTURE THESE DAYS: and March 29th (Spring Break)

January	Exp. #	Description				
13	1	Exp 1: Melting Points (Ch 3)—Do parts 1, 2 & 3, pages 51-53.				
20		Do questions 2-13, page 59-60.				
25	2	Exp 2: Crystallization (Ch 4)—Do parts 1 and 2, pages 79-81.				
27	2	Do questions 1, 2, 6, 8 and 9, page 87.				
Feb. 1	3	Exp 3: Distillation (Ch 5)—Do parts 1 and 2, pages 95-99.				
3	,	Do questions 2, 3 and 5-12, page 104.				
8	4	Exp 4: Steam Distillation (Ch 6)—Do parts 1 and 2, pages 110-111.				
10	7	Do questions 2-4, pages 133-134.				
22	5	Exp 5: Caffeine (Ch 7)—Do parts 1, 8 and 9, pages 145-147 and 168-170.				
24	7	Do questions 1 and 4, pages 170-171.				
March 1	- 6	Exp 6: TLC (Ch 8)—Do parts 1 and 4, pages 183-185 and 190-191.				
3		Do questions 2-7, 9 and 12, pages 192-193.				
8	7	Exp. 7: Column Chromatography (Ch 9)—Do part 2, pages 204-205.				
10	'	Do questions 1 and 2, page 214.				
15	- 8	Exp 8: Sn2 Reactions (Ch 16)—Do part 1, pages 327-329.				
17		Do questions 1 and 8, pages 330-331.				
22	9	Exp 9: Friedel-Crafts (Ch 29)—Do part 4, pages 443-444.				
		Do questions 1 and 4-6, page 450.				
24	10	Exp 10: Esterification (Ch 40)—Do part 1, pages 559-560.				
24		Do Question 1, page 566.				
April 5	11	Exp 11: Aldol (Ch 37)—Do part 1, pages 522-524.				
April 5		Do questions 2-5 and 7, page 525-527.				
7	12	Exp 12: Chemiluminescence (Ch 61)—Do parts 1 and 2, pages 755-757.				
	13	Exp 13: Diels-Alder (Ch 48)—Do parts 3-5, pages 665-673.				
12						
		Do questions 1-4 and 6, pages 673-674.				
14	14	Exp 14: Sandmeyer Reaction (Ch 44)—Do parts 1-3, pages 600-601.				
		Do questions 1-3, page 606.				
19	15	Exp 15: Wittig Reaction (Ch 39)—Do part 1, pages 548-549.				
04		Do question 1, page 552.				
21 26	16	Exp 16: Dyes and Dyeing (Ch 46) Do Synthesis of dyes, parts 1, 2 and 4, pages				
20		635-640. Do dyeing, parts 1, 2, 4, 5 and 7, pages 642-649.				

Due	Notebook	Exp#	Due	Notebook	Exp#
Jan. 25	1	1	Mar. 24	1	9
Feb. 1	2	2	Apr. 5	2	10
Feb. 8	1	3	Apr. 7	1	11
Feb. 22	2	4	Apr. 12	2	12
Mar. 1	1	5	Apr. 14	1	13
Mar. 8	2	6	Apr. 19	2	14
Mar. 15	1	7	Apr. 21	1	15
Mar. 22	2	8	Apr. 26	2	16

NO LABS THESE DAYS: January  $18^{th}$  (MLK) February  $15^{th}$  and  $17^{th}$  (Mardi Gras) and March  $29^{th}$  and  $31^{st}$  (Spring Break)